

# **Waste Isolation Pilot Plant Environmental Reporting Implementation Plan**

**Revision 3**

**U.S. Department of Energy**

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**Waste Isolation Pilot Plant  
Environmental Programs Reporting Implementation Plan  
DOE/WIPP 99-2286, Rev. 3**

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**ABBREVIATIONS AND ACRONYMS**

AIC	active institutional control
BECR	Biennial Environmental Compliance Report
C&C	Consultation and Cooperation (Agreement)
CBFO	Carlsbad Field Office
CCA	Compliance Certification Application
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	<i>Code of Federal Regulations</i>
CRA	Compliance Recertification Application
CTAC	CBFO Technical Assistance Contractor
DOT	U.S. Department of Transportation
DMW	detection monitoring well
DOE	U.S. Department of Energy
EH	DOE Office of Environment, Safety, and Health
EMNRD	Environment Minerals and Natural Resources Department
EPA	U.S. Environmental Protection Agency
HWFP	hazardous waste facility permits
HWDU	hazardous waste disposal unit
LANL	Los Alamos National Laboratory
LEPC	local emergency planning committee
LWA	Land Withdrawal Act
MOC	management and operating contractor
MSDS	material safety data sheet
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
PIC	passive institutional control
PCB	polychlorinated biphenyl
RCRA	Resource Conservation and Recovery Act
RQ	reportable quantity
SA	Scientific Advisor
SER	site environmental report

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SERC	State Emergency Response Commission
SIC	standard industrial classification
SRPA	Status Report on Program Activities
TSCA	Toxic Substance Control Act
TSDf	treatment, storage and disposal facility
TRU	transuranic
UST	underground storage tank
VOC	volatile organic compound
WIPP	Waste Isolation Pilot Plant
WRES	Washington Regulatory and Environmental Services

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## **1.0 INTRODUCTION**

Environmental protection programs that apply to the Waste Isolation Pilot Plant (WIPP) include many requirements related to reporting. In addition, the U.S. Department of Energy (DOE) has entered into agreements and is subject to DOE Orders that include reporting requirements. The DOE is obligated to report on various aspects of the project on a routine basis and non-routinely in the event that thresholds for unexpected or "off- normal" conditions are exceeded.

This reporting implementation plan is a management tool designed to assist the DOE Carlsbad Field Office (CBFO) in ensuring that all relevant reporting requirements originating from environmental compliance programs are satisfied. Reporting requirements addressed in this plan stem from:

- The WIPP Land Withdrawal Act (LWA)
- The Nuclear Waste Policy Act
- The Resource Conservation and Recovery Act (RCRA), as implemented by state of New Mexico regulations
- The Toxic Substances Control Act (TSCA)
- The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- The Clean Air Act
- The Clean Water Act
- The Safe Drinking Water Act
- Relevant DOE Orders
- The Consultation and Cooperation (C&C) Agreement with the state of New Mexico

This plan has several objectives:

- To identify reporting requirements necessary to comply with applicable laws, regulations, DOE Orders, agreements, and commitments (provided in Appendix A).
- To identify the project organization responsible for the preparation, review, and publication of reports that satisfy each reporting requirement or commitment (provided in Appendix A).

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- To provide information on report due dates and recurrence cycles (provided in Appendix A).
- To describe the process for managing the reporting function (provided in Section 3).

The relevant reporting requirements and commitments are summarized in Section 2.0. The process for managing the reporting function is described in Section 3.0.

## **2.0 REPORTING REQUIREMENTS AND COMMITMENTS**

The reporting requirements applicable to WIPP and stemming from the regulatory programs and agreements listed in Section 1.0 are briefly summarized below.

- In addition to authorizing the DOE to use the WIPP site for the development of the repository, the WIPP LWA specifies requirements related to reporting, primarily focused on DOE demonstrations that the project continues to comply with specified laws, regulations, and permit conditions.
- Consistent with provisions of the Nuclear Waste Policy Act and the WIPP Land Withdrawal Act, the U.S. Environmental Protection Agency (EPA) has promulgated two regulations that apply to WIPP. These are Title 40 *Code of Federal Regulations* (CFR) Part 191, "Environmental Radiation Protection Standards for the Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes," and 40 CFR Part 194, "Criteria for the Certification and Re-Certification of the Waste Isolation Pilot Plant's Compliance with the 40 CFR Part 191 Disposal Regulations." The Part 194 compliance certification criteria include requirements related to reporting. Also, the DOE has made commitments related to reporting in the Compliance Certification Application (CCA) (DOE/CAO-96-2184, *40 CFR 191 Compliance Certification Application for the Waste Isolation Pilot Plant*) and the subsequent Compliance Recertification Application (CRA), hereafter referred to as the compliance baseline.
- RCRA, as implemented by State of New Mexico regulations at New Mexico Administrative Code (NMAC) 20.4.1.100 through 20.5.7.704, applies to WIPP because some of the waste emplaced in the repository includes regulated hazardous constituents. Also, the management and operation of underground storage tanks (USTs) for petroleum products is addressed under the RCRA UST program. Petroleum storage tanks located at WIPP are subject to these requirements. The RCRA program, including provisions of the hazardous waste facility permit granted by the State, specifies many requirements related to reporting.

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- TSCA provides for the regulation of the management of polychlorinated biphenyls (PCBs). Some of the waste emplaced in WIPP includes PCBs; the EPA has issued the DOE an approval for the disposal of PCB transuranic (TRU) waste and PCB/TRU mixed waste at WIPP. The PCB approval includes reporting requirements.
- Regulations implementing CERCLA include requirements applicable to facility operators who use or manage toxic substances. Several reporting requirements apply to WIPP under the CERCLA program; these are primarily related to reporting spills or accidental environmental releases.
- Regulations implementing the Clean Air Act require the CBFO to report emissions of hazardous air pollutants from the WIPP. Also, diesel-fueled generators are located at the WIPP site to provide backup electrical power supply. An air quality permit has been granted by the State for these generators; the permit includes reporting requirements.
- Under the New Mexico program implementing provisions of the Clean Water Act, the DOE is obligated to report any proposal to construct or modify a sewage system. Also, the DOE has constructed and is operating a sewage treatment facility for WIPP that obligates the DOE to meet reporting requirements.
- Under provisions of the state program implementing the Safe Drinking Water Act, the DOE must report information pertaining to the quality of tap water supplied to the WIPP site.
- Two DOE Orders, DOE O 231.1A, *Environment, Safety, and Health Reporting*; and DOE O 451.1B, *National Environmental Policy Act Compliance Program*, include reporting requirements that pertain to WIPP. These focus on reporting occupational radiation exposures, environmental conditions, and environmental impact assessment and mitigation activities.
- The C&C Agreement with the state of New Mexico includes DOE commitments to report on several aspects of the project, including environmental data.

### **3.0 MANAGEMENT OF THE REPORTING FUNCTION**

Routine or regularly scheduled reporting is required on an ongoing basis throughout the operating period of the project. In addition, when warranted by project changes, off-normal conditions, or other emergency or unexpected events, it is necessary to prepare and submit unscheduled reports.

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### **3.1 Reporting Database**

Information related to WIPP environmental reporting is provided in Appendix A, WIPP Environmental Reporting Requirements. The appendix lists both scheduled and unscheduled reports. The following information is provided for each report:

- Name of the report
- Type of report, whether it is scheduled or unscheduled
- The frequency of report preparation and submittal
- The report due date, or period allowed for reporting
- The origin of the report (i.e., the regulatory "driver," agency agreement, DOE Order)
- A statement of the reporting requirement, often a specific regulation or permit condition
- The project organization responsible for preparing the report
- The project reviewing organization
- The recipient (or recipients) of the report

The data presented in Appendix A provide much of the information necessary to manage the environmental reporting function for the project. The Appendix A table is an MS Excel spreadsheet; it is available to project users on the Internet at: [www.wipp.energy.gov/library/caolib.htm](http://www.wipp.energy.gov/library/caolib.htm). Information in the electronic file may be sorted as desired by the user by highlighting all cells of the table (excluding the title and column headers) and using the "Data" "Sort" function in MS Excel. This allows listing the reports by common attributes such as the report name, regulatory driver, preparing organization, etc.

### **3.2 Scheduled Reports**

All regularly scheduled reports will be submitted by the originating MOC and the Scientific Advisor (SA) organizations to the pertinent CBFO staff. The CBFO Assistant Manager for Operations will review the submitted reports, provide any review comments to the originating group, and forward final reports to the CBFO Manager for submittal to the appropriate external entity.



### **3.3      Unscheduled Reports**

Unscheduled reporting will be nonroutine and will involve decision making regarding the significance of planned or unplanned changes or new information. Also, when changes occur or new information is developed, it will be necessary to determine the urgency for reporting the change or new information. Potential unscheduled reports are listed in Appendix A.

#### **3.3.1      Internal Reporting and Assessment**

Information flow within the project will be managed to ensure that proposals for changes and important new information is communicated to the appropriate individuals and groups. The CBFO Assistant Manager for Operations is the central point of contact for internal communication of planned and unplanned changes or new information, the assessment of the significance of the change or new information, and the communication of relevant information to external parties. The CBFO Assistant Manager for Operations is responsible for the following activities:

- **Information Exchange** - The CBFO Assistant Manager for Operations will ensure free exchange of information regarding planned or unplanned changes and new information between the MOC, the SA, and other project participants including the Los Alamos National Laboratory and the CBFO Technical Assistance Contractor.
- **Review and Assessment of Planned and Unplanned Changes** - As described earlier in this plan, changes may be significant or insignificant. When a planned change is proposed or an unplanned change is identified, the CBFO will decide whether to approve or disapprove the change if proposed by a contractor; or if the change is proposed from within the DOE, the CBFO will determine if outside approval is necessary (such as the EPA). If a proposed change is approved, the CBFO will determine whether the change is significant or nonsignificant. Likewise, if an unplanned change occurs, the CBFO will assess the significance of the change.
- **Review and Assessment of New Information** - New information may indicate two general cases: (1) normal or expected conditions in which results are consistent with existing data, parameter values, and conceptual models; or (2) anomalous conditions that are inconsistent with existing data, parameter values, or conceptual models. The CBFO Assistant Manager for Operations will review new data and associated interpretations to determine whether results are significant and warrant reporting.
- **Internal Reporting** – The CBFO Assistant Manager for Operations is responsible for reporting planned and unplanned changes and new information to the CBFO Manager and for recommending appropriate external reporting.

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### **3.3.2 Management and Operating Contractor**

It is the responsibility of the MOC to ensure that the CBFO is fully informed regarding any occurrence of planned or unplanned changes or new information warranting reporting.

### **3.3.3 Scientific Advisor**

The SA is also responsible for ensuring that the CBFO is fully informed of any planned or unplanned change or any new information developed through the activities of the SA organization. The SA will help ensure that the CBFO is fully informed in the event that the activities of the SA generate information that change current understanding of data, parameter values, or conceptual models that are important to the assessment of the performance of the repository.

## **4.0 RECORDS**

Reports and supporting documentation generated through the reporting processes discussed in this plan will be handled, stored, and dispositioned in accordance with the responsible organization's records inventory and disposition schedule and applicable procedures.

## **5.0 REFERENCES**

DOE O 231.1A, *Environment, Safety, and Health Reporting*. U.S. Department of Energy, Washington, D.C.

DOE O 451.1B, *National Environmental Policy Act Compliance Program*. U.S. Department of Energy, Washington, D.C.

DOE M 231.1-1, *Environment, Safety, and Health Reporting Manual*. U.S. Department of Energy, Washington, D.C.

DOE/CAO-96-2184. 1996. *40 CFR 191 Compliance Certification Application for the Waste Isolation Pilot Plant*. U.S. Department of Energy, Carlsbad Field Office, Carlsbad, NM.

40 CFR Part 191, "Environmental Radiation Protection Standards for the Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes"; Final Rule. *Code of Federal Regulations*. Office of the Federal Register, National Archives and Records Administration, Washington, D.C.

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- 40 CFR Part 194, "Criteria for the Certification and Re-Certification of the Waste Isolation Pilot Plant's Compliance with the 40 CFR Part 191 Disposal Regulations"; Final Rule. *Code of Federal Regulations*. Office of the Federal Register, National Archives and Records Administration, Washington, D.C.
- 40 CFR Part 761, "Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions." *Code of Federal Regulations*. Office of the Federal Register, National Archives and Records Administration, Washington, D.C.
- 40 CFR §761.180, "Records and Monitoring." *Code of Federal Regulations*. Office of the Federal Register, National Archives and Records Administration, Washington, D.C.